	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
10	BRS	L10	32	importin adj beta	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:56			0
11	BRS	L11	1711	translocat$3 same nucleus	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:57			0
12	BRS	L12	4	import$3 same (cargo adj protein)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:57			0
13	BRS	L13	8	(10 or 11 or 12) same 3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 14:00			0
14	BRS	L14	2	13 same interact$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 14:02			0
15	BRS	L15	5	kouzarides adj tony.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 14:04			0
16	BRS	L16	5	kouzarides adj t.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 14:04			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	BRS	L1	29	importin adj alpha	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:48			0
2	BRS	L2	96	(karyopherin adj alpha) or kap60 or srp1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:48			0
3	BRS	L3	114	1 or 2	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:48			0
4	BRS	L4	86	creb adj binding adj protein	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:50			0
5	BRS	L5	10	cbp adj polypeptide	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:50			0
6	BRS	L6	94	4 or 5	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:50			0
7	BRS	L7	1	3 same 6	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:52			0
8	BRS	L8	6	6 same acetylat$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:55			0
9	BRS	L9	16	6 same acetyltransferase	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/04/12 13:56			0

=> d his

(FILE 'HOME' ENTERED AT 14:09:17 ON 12 APR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
14:09:44 ON 12 APR 2003
L1 1755 S (IMPORTIN ALPHA) OR (KARYOPHERIN ALPHA) OR KAP60 OR SRP1
L2 3868 S (CREB BINDING PROTEIN) OR (CBP POLYPEPTIDE)
L3 13 S L1 (P) L2
L4 4 DUPLICATE REMOVE L3 (9 DUPLICATES REMOVED)
L5 3 S L4 (P) (INTERACT? OR ACETYLAT?)
L6 1272 S IMPORTIN BETA
L7 23192 S TRANSLOCAT? (P) NUCLEUS
L8 617 S CARGO PROTEIN
L9 644 S L1 (P) (L6 OR L7 OR L8)
L10 4 S L9 (P) L2
L11 1 DUPLICATE REMOVE L10 (3 DUPLICATES REMOVED)
L12 335 S KOUZARIDES T/AU
L13 1 S L12 AND L4
L14 0 S L13 NOT L11

=> log y

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FILE 'HOME' ENTERED AT 14:09:17 ON 12 APR 2003

=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'MEDLINE' ENTERED AT 14:09:44 ON 12 APR 2003

FILE 'CAPLUS' ENTERED AT 14:09:44 ON 12 APR 2003
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FILE 'EMBASE' ENTERED AT 14:09:44 ON 12 APR 2003
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FILE 'SCISEARCH' ENTERED AT 14:09:44 ON 12 APR 2003
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FILE 'AGRICOLA' ENTERED AT 14:09:44 ON 12 APR 2003

=> s (importin alpha) or (karyopherin alpha) or kap60 or srp1
L1        1755 (IMPORTIN ALPHA) OR (KARYOPHERIN ALPHA) OR KAP60 OR SRP1

=> s (creb binding protein) or (cbp polypeptide)
L2        3868 (CREB BINDING PROTEIN) OR (CBP POLYPEPTIDE)

=> s l1 (p) l2
L3          13 L1 (P) L2

=> duplicate remove l3
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L3
L4            4 DUPLICATE REMOVE L3 (9 DUPLICATES REMOVED)

=> d l4 1-4 ibib abs

L4   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:937303  CAPLUS
DOCUMENT NUMBER:          138:20443
TITLE:                    Endocrine disruptor screening using DNA chips of
                          endocrine disruptor-responsive genes
INVENTOR(S):              Kondo, Akihiro; Takeda, Takeshi; Mizutani, Shigetoshi;
                          Tsujimoto, Yoshimasa; Takashima, Ryokichi; Enoki,
                          Yuki; Kato, Ikunoshin
PATENT ASSIGNEE(S):       Takara Bio Inc., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 386 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     JP 2002355079      A2   20021210       JP 2002-69354    20020313
PRIORITY APPLN. INFO.:                   JP 2001-73183    A  20010314
                                         JP 2001-74993    A  20010315
                                         JP 2001-102519   A  20010330
AB   A method and kit for detecting endocrine-disrupting chems. using DNA
     microarrays are claimed.  The method comprises prepg. a nucleic acid
     sample contg. mRNAs or cDNAs originating in cells, tissues, or organisms
     which have been brought into contact with a sample contg. the endocrine
     disruptor.  The nucleic acid sample is hybridized with DNA microarrays
     having genes affected by the endocrine disruptor or DNA fragments
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originating in these genes h[redacted] been fixed. The results obta[redacted]d are then compared with the results obt[redacted]ned with the control sample to [redacted]lect the gene affected by the endocrine disruptor. Genes whose expression is altered by tri-Bu tin, 4-octaphenol, 4-nonylphenol, di-N-Bu phthalate, dichlorohexyl phthalate, octachlorostyrene, benzophenone, diethylhexyl phthalate, diethylstilbestrol (DES), and 17-.beta. estradiol (E2), were found in mice by DNA chip anal.

L4 ANSWER 2 OF 4 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 2002620053 MEDLINE
DOCUMENT NUMBER: 22254878 PubMed ID: 12161448
TITLE: Acetylation of the adenovirus-transforming protein E1A determines nuclear localization by disrupting association with importin-alpha.
AUTHOR: Madison Dana L; Yaciuk Peter; Kwok Roland P S; Lundblad James R
CORPORATE SOURCE: Division of Molecular Medicine, Department of Medicine, Oregon Health and Science University, Portland, Oregon 97201, USA.
CONTRACT NUMBER: DK051732 (NIDDK)
DK060133 (NIDDK)
SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (2002 Oct 11) 277 (41) 38755-63.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200211
ENTRY DATE: Entered STN: 20021017
Last Updated on STN: 20030105
Entered Medline: 20021125
AB Posttranslational modifications may alter the biochemical functions of a protein by modifying associations with other macromolecules, allosterically altering intrinsic catalytic activities, or determining subcellular localization. The adenovirus-transforming protein E1A is acetylated by its cellular targets, the co-activators ***CREB*** - ***binding*** ***protein*** , p300, and p300/ ***CREB*** - ***binding*** ***protein*** -associated factor in vitro and also in vivo at a single lysine residue (Lys(239)) within a multifunctional carboxyl-terminal domain necessary for both nuclear localization and interaction with the transcriptional co-repressor carboxyl-terminal binding protein (CtBP). In contrast to a previous report, we demonstrate that acetylation of Lys(239) does not disrupt CtBP binding and that 12 S E1A-mediated repression of ***CREB*** - ***binding*** ***protein*** -dependent transcription does not require recruitment of CtBP. Instead we find that the cytoplasmic fraction of E1-transformed 293 cells is enriched for acetylated E1A with relative exclusion from the nuclear compartment. Whereas wild type 12 S E1A binds ***importin*** - ***alpha*** 3, binding affinity was markedly reduced both by single amino acid substitution mutations and acetylation at Lys(239). This is the first demonstration that acetylation may alter nuclear partitioning by direct interference with nuclear import receptor recognition. The finding that the cytoplasmic fraction of E1A is acetylated indicates that E1A may exert its pleiotropic effects on cellular transformation in part by affecting cytoplasmic processes.

L4 ANSWER 3 OF 4 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 2000266303 MEDLINE
DOCUMENT NUMBER: 20266303 PubMed ID: 10805757
TITLE: Regulated nuclear-cytoplasmic localization of interferon regulatory factor 3, a subunit of double-stranded RNA-activated factor 1.
AUTHOR: Kumar K P; McBride K M; Weaver B K; Dingwall C; Reich N C
CORPORATE SOURCE: Department of Pathology, SUNY at Stony Brook, Stony Brook, New York 11794, USA.
CONTRACT NUMBER: PO1CA28146 (NCI)
RO1CA50773 (NCI)
SOURCE: MOLECULAR AND CELLULAR BIOLOGY, (2000 Jun) 20 (11) 4159-68.
Journal code: 8109087. ISSN: 0270-7306.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200007
ENTRY DATE: Entered STN: 20000714
Last Updated on STN: 20000714
Entered Medline: 20000706

AB Viral double-stranded RNA (dsRNA) generated during the course of infection leads to the activation of a latent transcription factor, dsRNA-activated factor 1 (DRAF1). DRAF1 binds to a DNA target containing the type I interferon-stimulated response element and induces transcription of responsive genes. DRAF1 is a multimeric transcription factor containing the interferon regulatory factor 3 (IRF-3) protein and one of the histone acetyl transferases, ***CREB*** ***binding*** ***protein*** (CBP) or p300 (CBP/p300). In uninfected cells, the IRF-3 component of DRAF1 resides in the cytoplasm. The cytoplasmic localization of IRF-3 is dependent on a nuclear export signal, and we demonstrate IRF-3 recognition by the chromosome region maintenance 1 (CRM1) (also known as exportin 1) shuttling receptor. Following infection and specific phosphorylation, IRF-3 accumulates in the nucleus where it associates with CBP and p300. We identify a nuclear localization signal (NLS) in IRF-3 that is critical for nuclear accumulation. Mutation of the NLS abrogates nuclear localization even following infection. The NLS appears to be active constitutively, but it is recognized by only a subset of ***importin*** - ***alpha*** shuttling receptors. Evidence is presented to support a model in which IRF-3 normally shuttles between the nucleus and the cytoplasm but cytoplasmic localization is dominant prior to infection. Following infection, phosphorylated IRF-3 can bind to the CBP/p300 proteins resident in the nucleus. We provide the evidence of a role for CBP/p300 binding in the nuclear sequestration of a transcription factor that normally resides in the cytoplasm.

L4 ANSWER 4 OF 4 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 2000264486 MEDLINE
DOCUMENT NUMBER: 20264486 PubMed ID: 10801418
TITLE: Acetylation of importin-alpha nuclear import factors by CBP/p300.
AUTHOR: Bannister A J; Miska E A; Gorlich D; Kouzarides T
CORPORATE SOURCE: Department of Pathology, Wellcome/CRC Institute, University of Cambridge, Cambridge, CB2 1QR, UK.
SOURCE: CURRENT BIOLOGY, (2000 Apr 20) 10 (8) 467-70.
Journal code: 9107782. ISSN: 0960-9822.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200006
ENTRY DATE: Entered STN: 20000616
Last Updated on STN: 20000616
Entered Medline: 20000602

AB Histone acetylases were originally identified because of their ability to acetylate histone substrates [1] [2] [3]. Acetylases can also target other proteins such as transcription factors [4] [5] [6] [7]. We asked whether the acetylase ***CREB*** - ***binding*** ***protein*** (CBP) could acetylate proteins not directly involved in transcription. A large panel of proteins, involved in a variety of cellular processes, were tested as substrates for recombinant CBP. This screen identified two proteins involved in nuclear import, Rch1 (human ***importin*** - ***alpha***) and importin-alpha7, as targets for CBP. The acetylation site within Rch1 was mapped to a single residue, Lys22. By comparing the context of Lys22 with the sequences of other known substrates of CBP and the closely related acetylase p300, we identified G/SK (in the single-letter amino acid code) as a consensus acetylation motif. Mutagenesis of the glycine, as well as the lysine, severely impaired Rch1 acetylation, supporting the view that GK is part of a recognition motif for acetylation by CBP/p300. Using an antibody raised against an acetylated Rch1 peptide, we show that Rch1 was acetylated at Lys22 in vivo and that CBP or p300 could mediate this reaction. Lys22 lies within the binding site for a second nuclear import factor, importin-beta. Acetylation of Lys22 promoted interaction with importin-beta in vitro. Collectively, these results demonstrate that acetylation is not unique to proteins involved in transcription. Acetylation may regulate a variety of biological processes, including nuclear import.

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=> d his

     (FILE 'HOME' ENTERED AT 14:09:17 ON 12 APR 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     14:09:44 ON 12 APR 2003
L1          1755 S (IMPORTIN ALPHA) OR (KARYOPHERIN ALPHA) OR KAP60 OR SRP1
L2          3868 S (CREB BINDING PROTEIN) OR (CBP POLYPEPTIDE)
L3            13 S L1 (P) L2
L4             4 DUPLICATE REMOVE L3 (9 DUPLICATES REMOVED)

=> s l4 (p) (interact? or acetylat?)
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L27 (P) '
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L29 (P) '
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L31 (P) '
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L33 (P) '
L5            3 L4 (P) (INTERACT? OR ACETYLAT?)

=> s importin beta
L6         1272 IMPORTIN BETA

=> s translocat? (p) nucleus
L7        23192 TRANSLOCAT? (P) NUCLEUS

=> s cargo protein
L8           617 CARGO PROTEIN

=> s l1 (p) (l6 or l7 or l8)
L9           644 L1 (P) (L6 OR L7 OR L8)

=> s l9 (p) l2
L10            4 L9 (P) L2

=> duplicate remove l10
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L10
L11            1 DUPLICATE REMOVE L10 (3 DUPLICATES REMOVED)

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L11  ANSWER 1 OF 1     MEDLINE                              DUPLICATE 1
ACCESSION NUMBER:   2000264486     MEDLINE
DOCUMENT NUMBER:    20264486   PubMed ID: 10801418
TITLE:              Acetylation of importin-alpha nuclear import factors by
                    CBP/p300.
AUTHOR:             Bannister A J; Miska E A; Gorlich D; Kouzarides T .
CORPORATE SOURCE:   Department of Pathology, Wellcome/CRC Institute, University
                    of Cambridge, Cambridge, CB2 1QR, UK.
SOURCE:             CURRENT BIOLOGY, (2000 Apr 20) 10 (8) 467-70.
                    Journal code: 9107782. ISSN: 0960-9822.
PUB. COUNTRY:       ENGLAND: United Kingdom
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        200006
ENTRY DATE:         Entered STN: 20000616
                    Last Updated on STN: 20000616
                    Entered Medline: 20000602
AB   Histone acetylases were originally identified because of their ability to
     acetylate histone substrates [1] [2] [3]. Acetylases can also target other
     proteins such as transcription factors [4] [5] [6] [7]. We asked whether
     the acetylase   ***CREB***  -  ***binding***     ***protein***   (CBP)
     could acetylate proteins not directly involved in transcription. A large
     panel of proteins, involved in a variety of cellular processes, were
     tested as substrates for recombinant CBP. This screen identified two
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proteins involved in nuclear [redacted]ort, Rch1 (human ***importi[redacted]* - ***alpha***) and importin alpha7, as targets for CBP. The [redacted]etylation site within Rch1 was mapped to a single residue, Lys22. By comparing the context of Lys22 with the sequences of other known substrates of CBP and the closely related acetylase p300, we identified G/SK (in the single-letter amino acid code) as a consensus acetylation motif. Mutagenesis of the glycine, as well as the lysine, severely impaired Rch1 acetylation, supporting the view that GK is part of a recognition motif for acetylation by CBP/p300. Using an antibody raised against an acetylated Rch1 peptide, we show that Rch1 was acetylated at Lys22 in vivo and that CBP or p300 could mediate this reaction. Lys22 lies within the binding site for a second nuclear import factor, ***importin*** - ***beta*** . Acetylation of Lys22 promoted interaction with ***importin*** - ***beta*** in vitro. Collectively, these results demonstrate that acetylation is not unique to proteins involved in transcription. Acetylation may regulate a variety of biological processes, including nuclear import.

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=> d his

     (FILE 'HOME' ENTERED AT 14:09:17 ON 12 APR 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     14:09:44 ON 12 APR 2003
L1          1755 S (IMPORTIN ALPHA) OR (KARYOPHERIN ALPHA) OR KAP60 OR SRP1
L2          3868 S (CREB BINDING PROTEIN) OR (CBP POLYPEPTIDE)
L3            13 S L1 (P) L2
L4             4 DUPLICATE REMOVE L3 (9 DUPLICATES REMOVED)
L5             3 S L4 (P) (INTERACT? OR ACETYLAT?)
L6          1272 S IMPORTIN BETA
L7         23192 S TRANSLOCAT? (P) NUCLEUS
L8           617 S CARGO PROTEIN
L9           644 S L1 (P) (L6 OR L7 OR L8)
L10            4 S L9 (P) L2
L11            1 DUPLICATE REMOVE L10 (3 DUPLICATES REMOVED)

=> s kouzarides t/au
L12          335 KOUZARIDES T/AU

=> s l12 and l4
L13            1 L12 AND L4

=> s l13 not l11
L14            0 L13 NOT L11

=> d his

     (FILE 'HOME' ENTERED AT 14:09:17 ON 12 APR 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     14:09:44 ON 12 APR 2003
L1          1755 S (IMPORTIN ALPHA) OR (KARYOPHERIN ALPHA) OR KAP60 OR SRP1
L2          3868 S (CREB BINDING PROTEIN) OR (CBP POLYPEPTIDE)
L3            13 S L1 (P) L2
L4             4 DUPLICATE REMOVE L3 (9 DUPLICATES REMOVED)
L5             3 S L4 (P) (INTERACT? OR ACETYLAT?)
L6          1272 S IMPORTIN BETA
L7         23192 S TRANSLOCAT? (P) NUCLEUS
L8           617 S CARGO PROTEIN
L9           644 S L1 (P) (L6 OR L7 OR L8)
L10            4 S L9 (P) L2
L11            1 DUPLICATE REMOVE L10 (3 DUPLICATES REMOVED)
L12          335 S KOUZARIDES T/AU
L13            1 S L12 AND L4
L14            0 S L13 NOT L11

=> log y
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                              50.29      50.50
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